9. Shirts

Program Name: Shirts.java   Input File: shirts.dat

Since you are a fashionable computer scientist, with a measure of OCD in your personality, you decide to keep your shirts in your closet in a very specific order. First you sort your shirts by color, with this order from left to right: red ("R"), orange ("O"), yellow ("Y"), green ("G"), and blue ("B"). Among shirts that are the same color, you sort them by size, smallest to largest ("S" < "M" < "L"). Also, since you're a computer scientist, each of your shirts had a unique ID, so if they are the same color and size, the one with the smallest ID goes first. You just did your laundry, so rather than sort them yourself you'll write a program to do it. Write a program that, given the shirts in your laundry, outputs the ID's of the shirts in sorted order.

Input
The first line will contain the number of test cases T.
Each test case will begin with a single line, the number of shirts in your laundry pile, N.
Each of the next N lines represents a shirt in the following format: ID, color, size.

Output
For each test case, sort the shirts in the specified order, and then output the sorted shirt IDs, separated by spaces, on a single line.

Constraints
```
1 <= T <= 10
0 <= N <= 20
```

Example Input File
```
2
2
1 R M
2 O S
5
8 G M
12 G S
5 R M
15 Y L
6 Y L
```

Example Output to Screen
```
1 2
5 6 15 12 8
```

Explanation of the example
In the first test case, R comes before O, so shirt 1 comes before shirt 2.
In the second test case, R comes first, so shirt 5 is first. Since Y comes before G, 6 and 15 are next. 6 and 15 have the same color and size, so we order them by ID, so the next two are 6 and 15. Finally, we have the two green shirts 8 and 12. 12 is an S and 8 is an M, so 12 comes before 8. Thus, the final order is 5 6 15 12 8.